

II. Listing of Claims

1. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack for driving the carriage along the frame assembly, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface.

2. (Previously Presented) The frame assembly in accordance with Claim 1 further comprising the side panels further defining the roller channel opening inwardly formed in part by the first track surface which extends inwardly.

3. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface and the second track surface extending inwardly a greater distance than the first track surface.

4. (Previously Presented) The frame assembly in accordance with Claim 3 wherein the toothed rack is affixed to the second track surface with teeth of the toothed rack facing downwardly.

5. (Original) The frame assembly in accordance with Claim 1 further comprising the side panels forming a pocket.

6. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface, further comprising the side panels forming a pocket, a bar fastened within the pocket for enabling multiple track surfaces of the side panels to be connected together.

7. (Original) The frame assembly in accordance with Claim 6 further comprising the pocket opening outwardly.

8. (Original) The frame assembly in accordance with Claim 1 further comprising the first track surface formed by a reversely bent flange.
9. (Original) The frame assembly in accordance with Claim 1 further comprising the second track surface formed by a reversely bent flange.
10. (Previously Presented) The frame assembly in accordance with Claim 1 further comprising the pair of the side panels including a right-hand side panel and a left-hand side panel and a top panel extending between the right-hand side panel and the left-hand side panel so as to enclose the carriage.
11. (Original) The frame assembly in accordance with Claim 10 further comprising the top panel being integrally formed with the right-hand side panel and the left-hand side panel.
12. (Original) The frame assembly in accordance with Claim 1 further comprising one or more tie bars connecting a pair of the side panels together to define a right-hand side panel and a left-hand side panel.
13. (Original) The frame assembly in accordance with Claim 1 further comprising the frame assembly forming a forward end for positioning adjacent to the combustion device and a rearward end for positioning spaced from the combustion device, the sootblower having a rear module attachable to the side panels and having rail track

surfaces for supporting the support rollers and the rear module having means for enabling removal of the carriage from the sootblower.

14. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface the side panels each forming a first and a second roller channel, the first and the second roller channels having vertical spacings which are different whereby the side panels can accept rollers of different diameters.

15. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface, the side panels forming profile track surfaces having "T" shaped channels for receiving fasteners.

16. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a

drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface, one or more of the side panels formed by a plurality of separately formed panel track surfaces affixed together to form the side panel.

17. (Original) The frame assembly in accordance with Claim 16 further comprising the panel track surfaces cooperating with the side panels to define enclosed track surfaces forming cavities.

18. (Previously Presented) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about

generally horizontal axes and the drive pinion gear meshing with a toothed rack, the frame assembly comprising:

a pair of elongated side panels, the side panels formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal panel track surface, a second generally horizontal panel track surface and a vertical panel track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical panel track surface cooperating to define a roller channel extending substantially the entire length of the side panels for supporting the support rollers to roll along the side panels and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface, the first and the second track surfaces having a crowned surface for engaging the carriage roller and the roller having a complementary shaped crowned profile surface.

19. (Original) The frame assembly in accordance with Claim 1 further comprising the carriage rollers engaging the first track surface to restrain loads primarily acting in the vertical direction.

20. (Previously Presented) The frame assembly in accordance with Claim 1 further comprising the side panels having a corrosion resistant coating substantially covering an entire exterior surface of the side panels.

21. (Original) The frame assembly in accordance with Claim 20 further comprising the corrosion resistant coating is a galvanizing coating.

22. (Original) The frame assembly in accordance with Claim 1 further comprising at least one of the first or the second track surface having a flange for trapping the roller.

23. (Original) The frame assembly in accordance with Claim 1 further comprising the first track surface formed by a projecting flange having a round cross-sectional shape.

24. (Previously Presented) The frame assembly in accordance with Claim 1 further comprising the first track surface having a plurality of perforations for engagement with the roller so that the first track defines the toothed rack.

25. (Original) The frame assembly in accordance with Claim 1 further comprising the first track surface having a track bar disposed thereon for engagement with the carriage roller.

26. (Previously Presented) The frame assembly in accordance with Claim 1 further comprising the toothed rack being affixed to at least one of the first track surface and the second track surface and positioned inwardly of the roller channel to trap at least one of the support rollers between the toothed rack and the vertical panel surface.

27. – 37. Cancelled.

38. (Previously Presented) A frame for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear meshing with a toothed rack affixed to the frame for driving the carriage along the frame assembly, the frame comprising:

a pair of elongated side panels including a right-hand side panel and a left-hand side panel, the side panels made of substantially uniform thickness metal stock each formed to integrally define an inwardly facing channel, each having a lower surface defined by a first horizontal panel track surface for allowing the support rollers to roll along the side panels and each having an upper surface defined by a second horizontal panel track surface for mounting the toothed rack to the side panels with the first and second track surfaces joined by a first track surface, at least one of the first track surface and the second track surface formed by a reversely bent flange.

39. Cancelled.

40. Cancelled.

41. (Previously Presented) A frame for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance

tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear meshing with a toothed rack affixed to the frame, the frame comprising:

a pair of elongated side panels including a right-hand side panel and a left-hand side panel, the side panels made of substantially uniform thickness metal stock each formed to integrally define an inwardly facing channel, each having a lower surface defined by a first horizontal panel track surface for allowing the support rollers to roll along the side panels and each having an upper surface defined by a second horizontal panel track surface for mounting the toothed rack to the side panels with the first and second track surfaces joined by a first track surface, at least one of the first track surface and the second track surface formed by a reversely bent flange, wherein the toothed rack is fastened to the second track surface inboard of the support roller with teeth of the toothed rack facing downwardly.

42. - 62. Cancelled.

63. (New) A frame assembly for a sootblower for projecting a stream of a fluid blowing medium against internal surfaces of a combustion device, the sootblower of the type having a lance tube and a carriage which carries the lance tube causing it to be periodically advanced into and retracted from the interior of the combustion device, the carriage of the type having one or more support rollers and a drive pinion gear, the support rollers and the drive pinion gear being rotatable about generally horizontal axes and the drive pinion gear meshing with a toothed rack for driving the carriage along the frame assembly, the frame assembly comprising:

a pair of elongated side rails, the side rails formed of substantially uniform thickness metal stock formed to integrally define a first generally horizontal track surface, a second generally horizontal track surface and a vertical track surface extending between the first and the second track surfaces, the first track surface, the second track surface and the vertical track surface cooperating to define a roller channel extending substantially the entire length of the side rails for supporting the support rollers to roll along the side rails and to trap the support rollers within the roller channel, the toothed rack affixed to or defined by at least one of the first track surface and the second track surface.

64. (New) The frame assembly in accordance with Claim 63 further comprising the side rails further defining the roller channel opening inwardly formed in part by the first track surface which extends inwardly.

65. (New) The frame assembly in accordance with Claim 63 further comprising the second track surface extending inwardly a greater distance than the first track surface.

66. (New) The frame assembly in accordance with Claim 63 wherein the toothed rack is affixed to the second track surface with teeth of the toothed rack facing downwardly.

67. (New) The frame assembly in accordance with Claim 63 further comprising the side rails forming a pocket.

68. (New) The frame assembly in accordance with Claim 67 further comprising the pocket opening outwardly.

69. (New) The frame assembly in accordance with Claim 63 further comprising the carriage rollers engaging the first track surface to restrain loads primarily acting in the vertical direction.

70. (New) The frame assembly in accordance with Claim 63 further comprising the toothed rack being affixed to at least one of the first track surface and the second track surface and positioned inwardly of the roller channel to trap at least one of the support rollers between the toothed rack and the vertical panel surface.

71. (New) The frame assembly in accordance with Claim 63 further comprising the side rails each affixed to a side panel.

72. (New) The frame assembly in accordance with Claim 71 further comprising the side rails each affixed to a side panel by bolts.

73. (New) The frame assembly in accordance with Claim 71 further comprising the side panel having upper and lower "T" slot sections enabling individual sections of the side panels to be connected together using a bar inserted within the "T" slots.